

**REMARKS****Response to Applicants' Traversal**

On April 27, 2009, Applicants' elected Group 7, drawn to claims 21-25 and linking claims 1, 12, 21-31, 62-63, and 65-68, with traverse. In response to Applicants' reasons for traversal, *i.e.*, that at least claim 12, which links groups 5-7, is patentable and, accordingly, represents a contribution over the prior art, the Examiner states that Applicants have not provided any basis for this argument. The Examiner reiterates that Chung *et al.*, *Journal of the American Association for Cancer Research*, 2000, 6:1452-1458, ("Chung") teaches the technical feature associated with Groups 1-11. Specifically, the Examiner states that Chung teaches a method for treating nasopharyngeal carcinoma comprising administering phenylbutyrate (4-PB) and ganciclovir (GCV).

Applicants respectfully disagree with the Examiner. Chung describes a kinase, which is present in a cell *per se*. This teaching is distinguishable from the pharmaceutical composition of the instant claims. Specifically, Chung discloses that 4-PB can increase thymidine kinase activity in an EBV positive cancer cell line, but not in an EBV negative cell line. Accordingly, the EBV thymidine kinase described in Chung is endogenous to the cancer cell line.

Applicants further submit that the Chung document does not disclose that a cancer cell can be treated using 4-PB, a nucleoside analog, and deoxyribonucleoside kinase (dNK) simultaneously, *e.g.*, as encompassed by instant claim 12. Chung has merely disclosed some information regarding the combination of GCV and 4-PB in therapy. Chung, however, does not teach or suggest the combination of dNK, a nucleoside analogue and 4-PB in a pharmaceutical composition. Accordingly, claim 12 is patentable in view of Chung.

Based upon the foregoing, the Examiner should, at least, search and consider the claims included within Groups 5-7, which is inclusive of all claims listed within these groups as well as, at least, the linking claim 12, discussed above and additionally claims 1, 26-31, 62-63 and 65-68,

which were also previously admitted by the Examiner to be linking claims. Reconsideration is respectfully requested.

### **Substance of the Interview**

As noted below, the Examiner has further required that Applicants elect sequences from SEQ ID NOS: 1-17 for search and consideration. Applicants' representative contacted the Examiner on August 20, 2009, to request clarification regarding the number of sequences, which Applicants' may elect. The Examiner stated that Applicants may elect up to five sequences. Applicants thank the Examiner for extending the courtesy of this interview.

### **Further Restriction Requirement**

Applicants are further required to elect at least one sequence and up to five sequences from SEQ ID NOS. 1-17.

**For the purpose of examination of the present application, Applicants elect SEQ ID NO: 1, Herpes simplex virus thymidine kinase, SEQ ID NO: 2, *Drosophila melanogaster* deoxyribonucleoside kinase, SEQ ID NO. 3, *i.e.*, the truncated form of the tomato thymidine kinase, which encompasses the full length sequence (SEQ ID NO. 17), SEQ ID NO: 15, *Arabidopsis thaliana* thymidine kinase TK1, and SEQ ID NO: 16, *Arabidopsis thaliana* thymidine kinase TK1b. This election is with traverse.**

Traversal is on the grounds that there is no undue administrative burden placed upon the Examiner to search and consider all claims in their entirety. Accordingly, withdrawal of the further restriction requirement is also respectfully requested.


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact L. Parker, Registration No. 46,046, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

- ☐ Attached is a Petition for Extension of Time.
- ☐ Attached hereto is the fee transmittal listing the required fees.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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